

The Existing Conditions memo provides additional detail on existing land use and transit services.

## 3 EXISTING LAND USE AND TRANSIT SERVICES

### EXISTING LAND USE

Land use and development in the City of Bend is guided by its adopted General Plan. The General Plan is implemented primarily by the City’s development code. The City’s General Plan and Zoning map illustrate land use or zoning districts, which define characteristics such as allowed land uses and intensity of development. These districts include several types of residential zones (low, standard, medium, and high-density), non-residential zones such as commercial or industrial, and mixed-use zones that allow both residential and non-residential uses to be combined on a site. The City’s Urban Growth Boundary (UGB) establishes land appropriate for annexation and urban development based upon a 20-year population projection, and the Urban Reserve Boundary identifies the long-term expansion needs of the City beyond the 20-year period.

### EXISTING TRANSIT SERVICES

#### Transit Overview

Local fixed-route bus service in Bend is operated by Cascades East Transit (CET) and serves developed areas within the Bend city limits. As shown in Figure 3-2, the system consists of seven routes that are designed to radiate in a “hub and spoke” pattern from the main transit center, Hawthorne Station (shown in Figure 3-1). CET Community Connector service provides direct regional connections between Hawthorne Station and La Pine and Redmond. From Redmond, the regional transit hub, additional connections are available to Redmond Airport, Prineville, Madras, and Sisters, as shown in Figure 3-3. CET also operates seasonal service to Mt. Bachelor and the Ride the River route in Bend. Figure 3-4 describes the characteristics of local, regional, and seasonal services.

In addition, Dial-A-Ride (curb-to-curb) service is available to persons with disabilities and low-income seniors within Bend city limits.

## Local Fixed-Route Service

Seven local bus routes depart from Hawthorne Station on common schedules to facilitate transfers between routes. This timed-transfer system is known as a “pulse” and its “hub-and-spoke” design (see Chapter 7) allows any destination in Bend that is served by transit to be reached with no more than one transfer. Passenger stops are spaced at intervals ranging from two blocks to about a mile. Most routes terminate in a one-way loop to extend coverage at the end of each route or to turn the bus around.

- **Routes 1 (S. 3<sup>rd</sup>) and 4 (N. 3<sup>rd</sup>)** operate in both directions along 3<sup>rd</sup> Street (Highway 97 Business Route).
- **Routes 2 (Brookwood) and 11 (Galveston)** serve SW Bend, including downtown Bend and the Old Mill District.
- **Route 3 (Newport)** serves Central Oregon Community College (COCC), Northwest Crossing, and Summit High School.
- **Routes 5 (Wells Acres) and 6 (Bear Creek)** serve the portion of the city east of 3<sup>rd</sup> Street, north and south of Greenwood Avenue, respectively. These routes serve key activity centers including St. Charles Medical Center, the Forum Shopping Center, and the Senior Center.

Buses run every 40 minutes on weekdays, from about 6:20 AM to 6:15 PM. Service hours are slightly shorter on Saturdays and buses run every 80 minutes. There is no service on Sundays. Route 11, the newest local route, runs for slightly shorter weekday hours than other routes and has several gaps in service. Route 11 also does not run on Saturdays. A one-way fare is \$1.50, discounted to \$0.75 for seniors (age 60 and older) or persons with disabilities. A full-fare pass allowing all-day use costs \$2.50 and a monthly pass costs \$30.

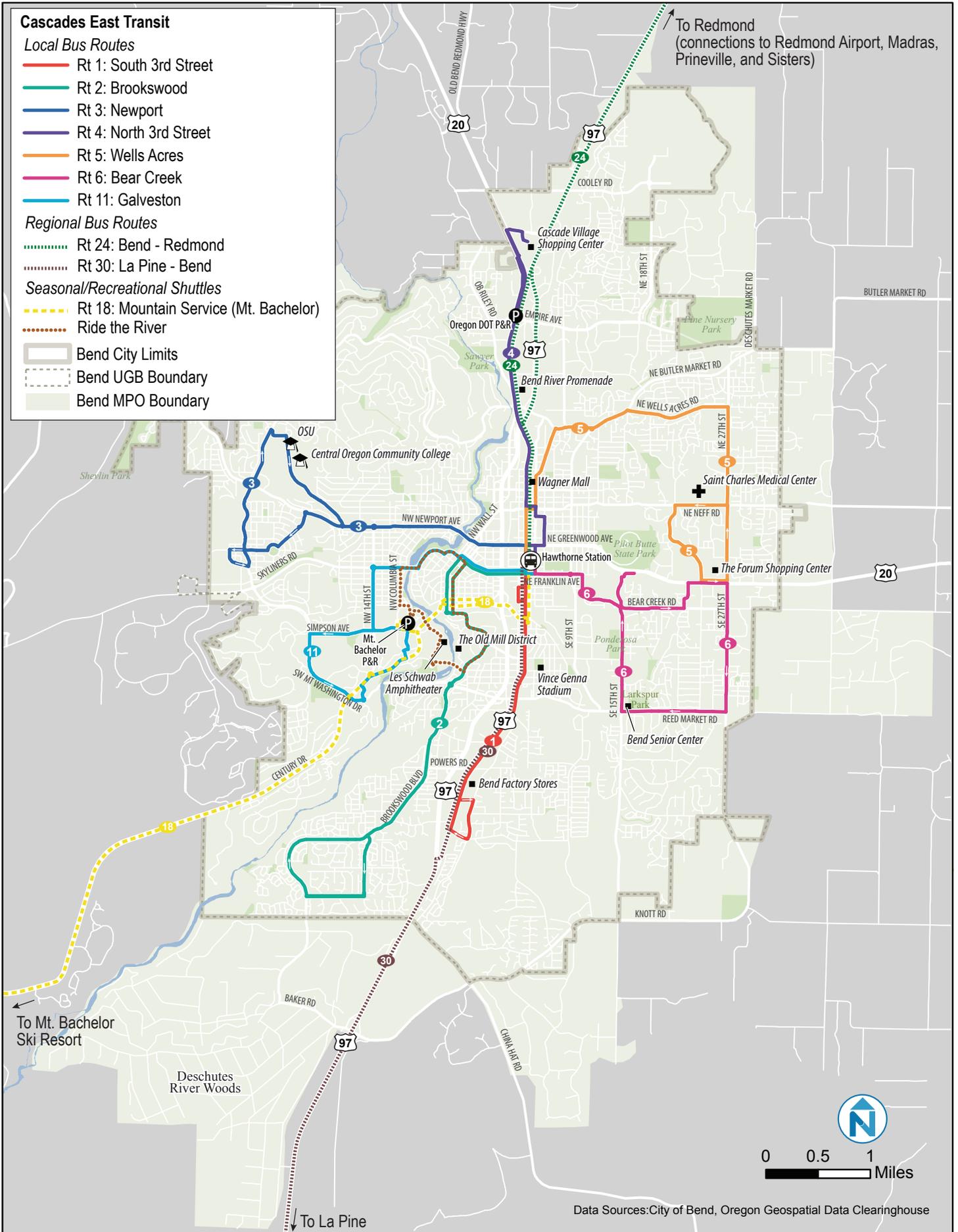
All CET fixed-route buses have a rack that can carry two bicycles. In 2011, 1,700 bikes per month were brought on buses in Bend, on average.

**Figure 3-1 Hawthorne Station**

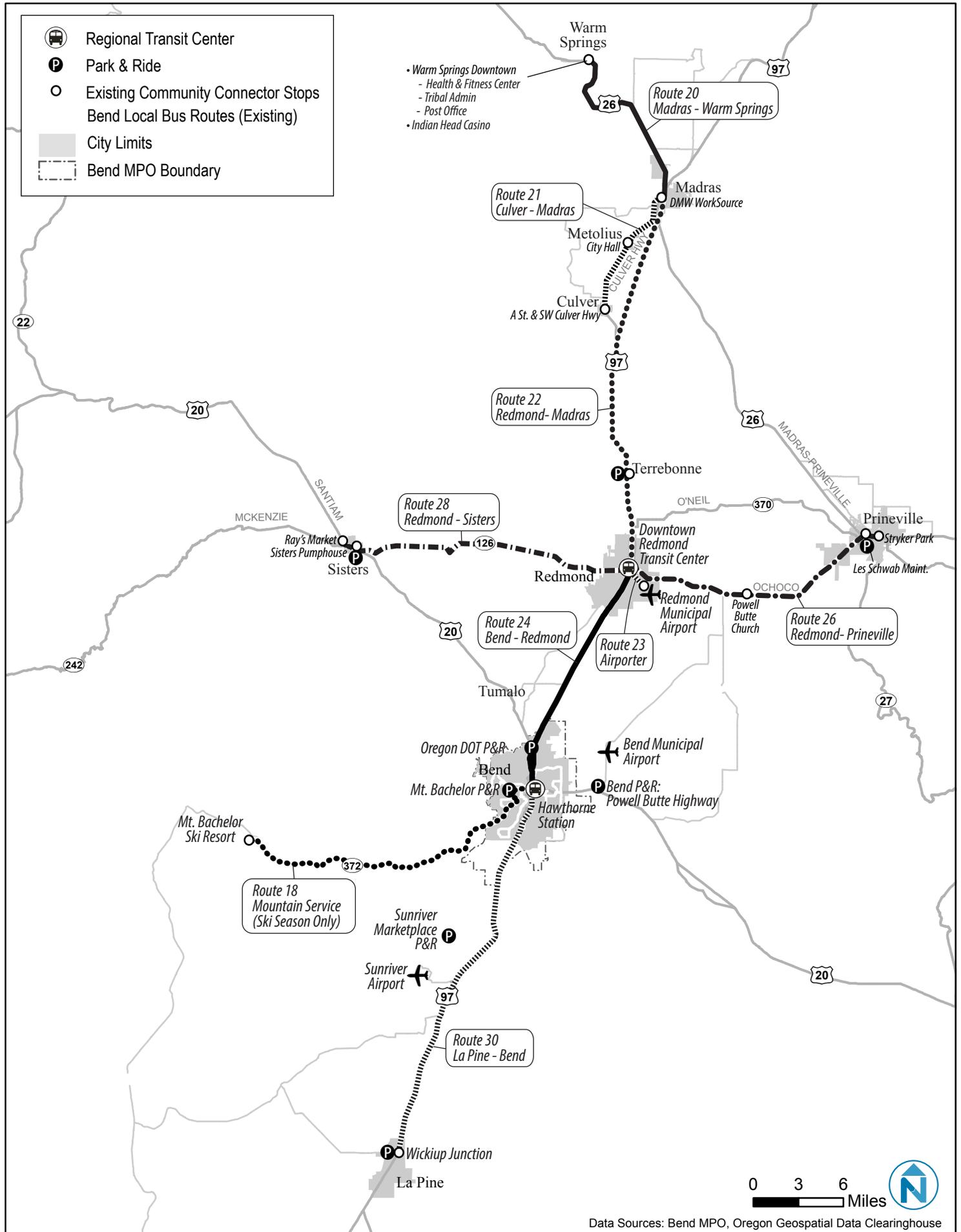


Hawthorne Station is located on SE Hawthorne Ave. directly east of 3<sup>rd</sup> Street. It has an indoor waiting area with restrooms and shelters for CET local and regional buses as well as other inter-city buses.

**Figure 3-2 Existing Transit Services**



**Figure 3-3 Existing Regional Transit Services**



**Draft Public Transit Plan**  
Bend MPO

**Figure 3-4 Bus Service Characteristics**

Route # and Name	Days of Operation	Weekday <sup>1,2</sup> Hours of Service (Span)	Frequency or Number of Daily Trips	Key Destinations/ Connections <sup>3</sup>
<b>Bend Local Service</b>				
1 South 3 <sup>rd</sup> St.	Mon - Sat	6:20 AM – 6:15 PM <sup>1</sup>	40 minutes, 80 minutes Saturdays	Fred Meyer, Bend Factory Outlets, Walmart
2 Brookwood	Mon – Sat	6:20 AM – 6:15 PM <sup>1</sup>	40 minutes, 80 minutes Saturdays	Downtown Library, Old Mill District
3 Newport	Mon – Sat	6:20 AM – 6:30 PM <sup>2</sup>	40 minutes, 80 minutes Saturdays	COCC/OSU Campus, Summit High School
4 North 3 <sup>rd</sup> St.	Mon – Sat	6:20 AM – 6:15 PM <sup>2</sup>	40 minutes, 80 minutes Saturdays	Cascade Village, ODOT Park & Ride (P&R)
5 Wells Acres	Mon – Sat	6:20 AM – 6:15 PM <sup>1</sup>	40 minutes, 80 minutes Saturdays	Mtn. View High School, St. Charles Medical Center, Forum Shopping Center
6 Bear Creek	Mon - Sat	6:20 AM – 6:15 PM <sup>2</sup>	40 minutes, 80 minutes Saturdays	Senior Center, Municipal Court, Bend High School, Veterans Center, Worksource Bend
11 Galveston	Mon - Fri	7:20–5:45 PM (not continuous)	40 minutes (no service 9:50–11:20 AM, 12:30 – 2:40 PM, and 3:50–4:40 PM), no service on Saturdays	Mt. Bachelor Park & Ride, Social Security, Bend Memorial Clinic
<b>Selected Regional Services <sup>4</sup></b>				
24 Redmond-Bend	Mon – Fri	6:00 AM – 6:30 PM	4 AM and 4 PM round trips (no midday service from 11:10 am – 1:20 pm)	From Redmond, regional connections include Madras (22), Prineville (26), Sisters (28)
30 La Pine-Bend <sup>4</sup>	Mon – Fri	6:45 AM – 6:15 PM	To Bend: 2 AM, 1 PM. To La Pine: 1 AM, 2 PM. No service from about 9:00 AM-3:30 PM	Wickiup Junction P&R (Burgess Road & Hwy 97)
23 Redmond-Airport	Mon – Fri	7:00 AM – 5:30 PM	4 AM and 3 PM round trips (no midday service, from about 11:30 AM - 2:30 pm)	Redmond Transit Center to Redmond Airport
<b>Seasonal Shuttles</b>				
18 Mt. Bachelor	Daily	6:40 AM – 5:40 PM	During ski season, 6 trips to Mt. Bachelor (one additional Wed. trip) and 5 return trips to Bend.	Mt. Bachelor P&R (SW Columbia & Simpson). 2 round trips serve Hawthorne Station.
Ride the River	Fri – Mon	11:35 AM – 6:45 PM	During summer (3 <sup>rd</sup> weekend in June to Labor Day), every 30 minutes	Drake, McCay, and Riverbend Parks

Notes: (1) Saturday service runs from approximately 7:20 am to 5:15 pm. (2) Saturday service runs from approximately 8:00 am to 4:30 pm. (3) All routes except Redmond Airport Shuttle serve Hawthorne Station. (4) Reflects service changes effective 10/1/2012.

## Activity Centers and Boarding Activity

Figure 3-6 illustrates major activity centers in Bend in relation to fixed-route bus service and a “network buffer” that illustrates a quarter-mile walking distance to/from bus stops. This map shows that transit is within a reasonable walking distance of many major destinations in Bend.

Figure 3-7 illustrates boarding and alighting activity along each bus route. The map illustrates distribution of activity along each route and underutilized portions of routes. Figure 3-5 identifies stops with the highest boarding activity.

**Figure 3-5 Weekly Boardings and Alightings for Top 15 Bus Stops**

Stop #	Route	Stop Description	Boardings	Alightings	Shelter
MAIN	All	Hawthorne Station	4,046	3,655	Yes
317	3	COCC (Library)	602	552	Yes
614	6	East side of 15th at Riviera	194	157	No
413	4	West side of 3rd S. of NE Mervin Samples	164	48	No
533	5	West side of NE Purcell N. of NE Lotus	159	106	No
203	2	West side of NW Wall at Library	150	216	No
411	4	Cascade Village Mall, N. end of JC Penney	149	172	No
608	6	South side of Hwy 20 at NE 27th	146	134	No
302	3	North side of Greenwood and Bond	128	112	No
229	2	East side of NW Bond S. of NW Kansas	125	41	Planned*
112	1	West side of S. Hwy 97 north of Pinebrook	106	111	Yes
619	6	1645 NE Forbes in WorkSource parking lot	105	65	No
404	4	East side of 3rd N. of Revere (Wagner Mall)	104	81	Yes
539	5	NE 27th at Forum Shopping Center	99	55	No
517	5	NE Neff at St. Charles Medical Center	96	78	Yes

Note: \* As of 5/2012. Additional planned shelters include stop #'s 412, 108, 537, 1133, 1130, 1136.

Source: CET Boarding and Alighting Survey, 1/14/2012 to 1/19/2012, and CET Bus Stop Inventory as of 12/3/2012.

Figure 3-6 Major Activity Centers

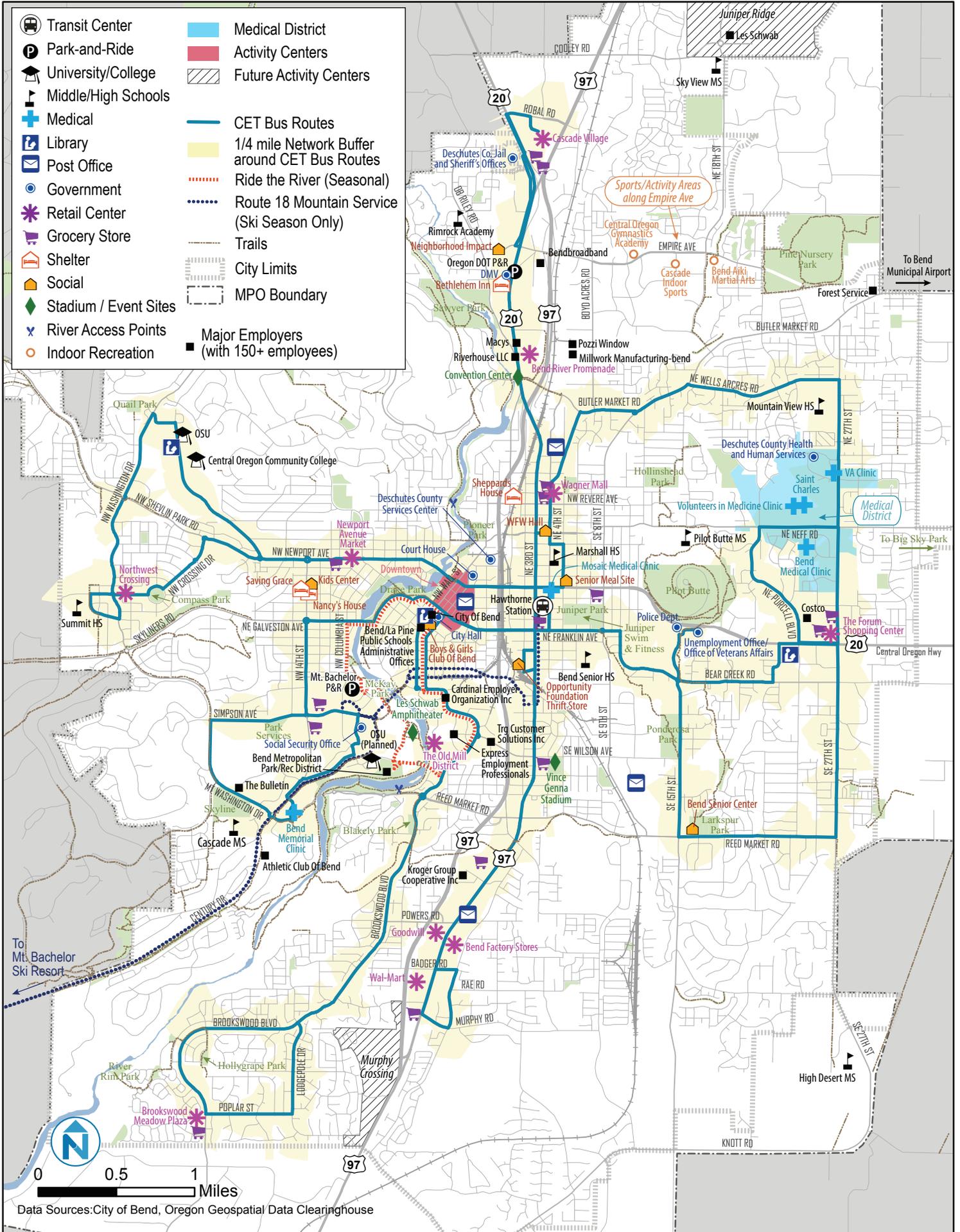
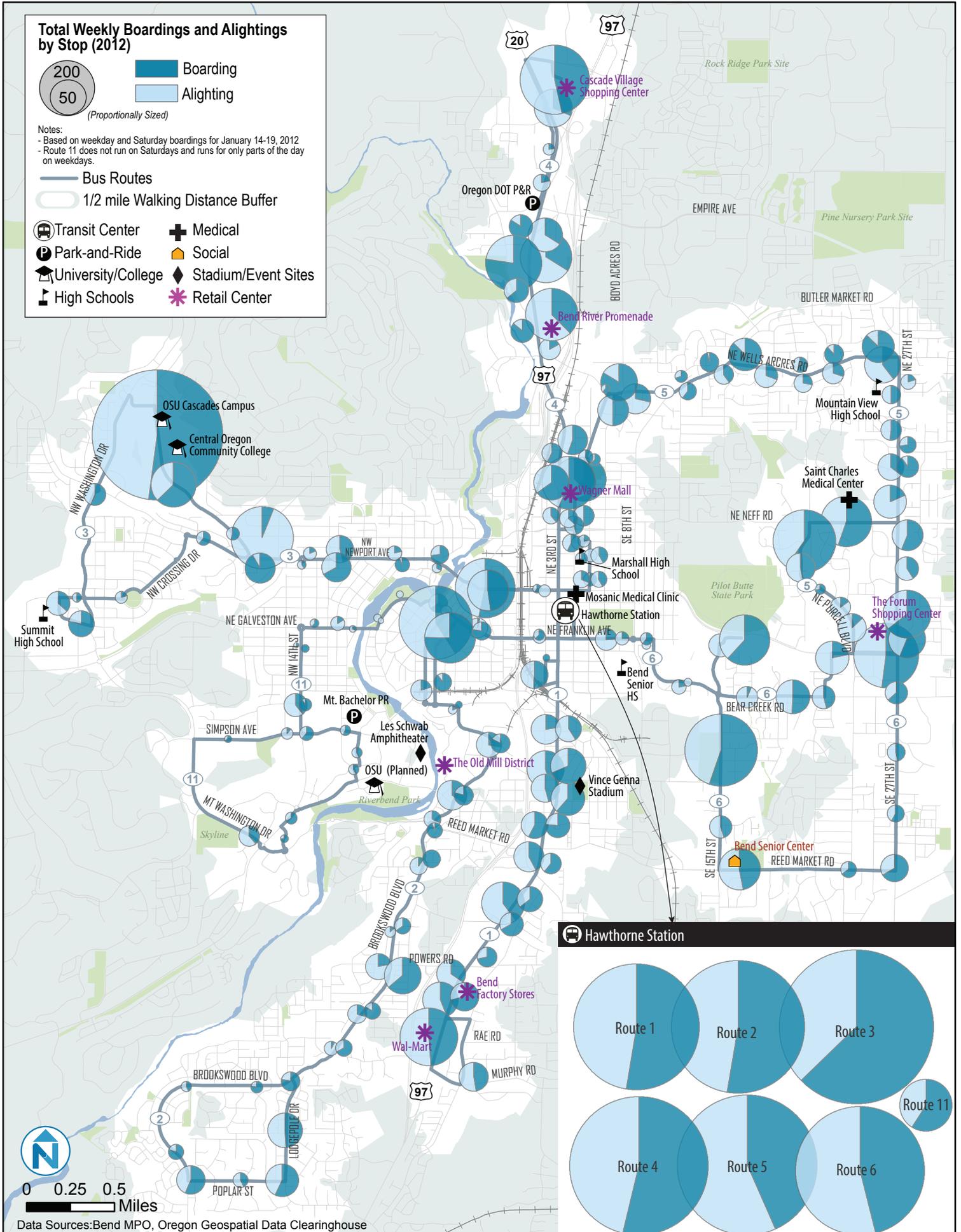


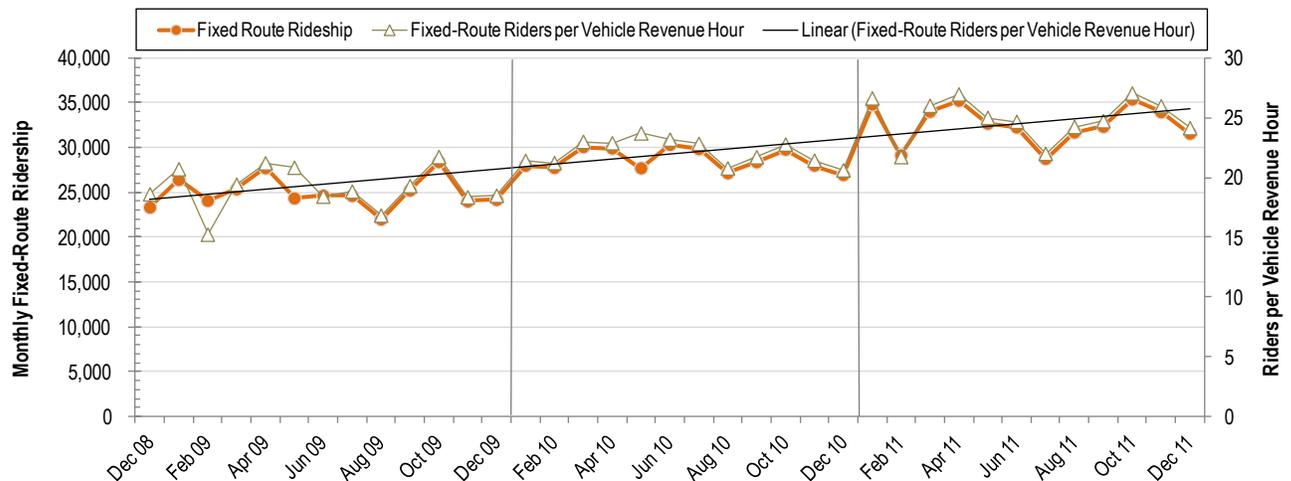
Figure 3-7 Existing Weekly Transit Boardings and Alightings, 2012



## System Performance

The fixed-route system in Bend served over 391,000 rides in calendar year 2011. Figure 3-8 illustrates that ridership on the fixed-route system increased over the past three years. Productivity, or the number of riders carried per vehicle revenue hour, has also increased; the additional ridership was served using existing capacity in the system (without additional vehicles or trips).

**Figure 3-8 Monthly Fixed-Route Ridership and Productivity by Route, 2009-2011**



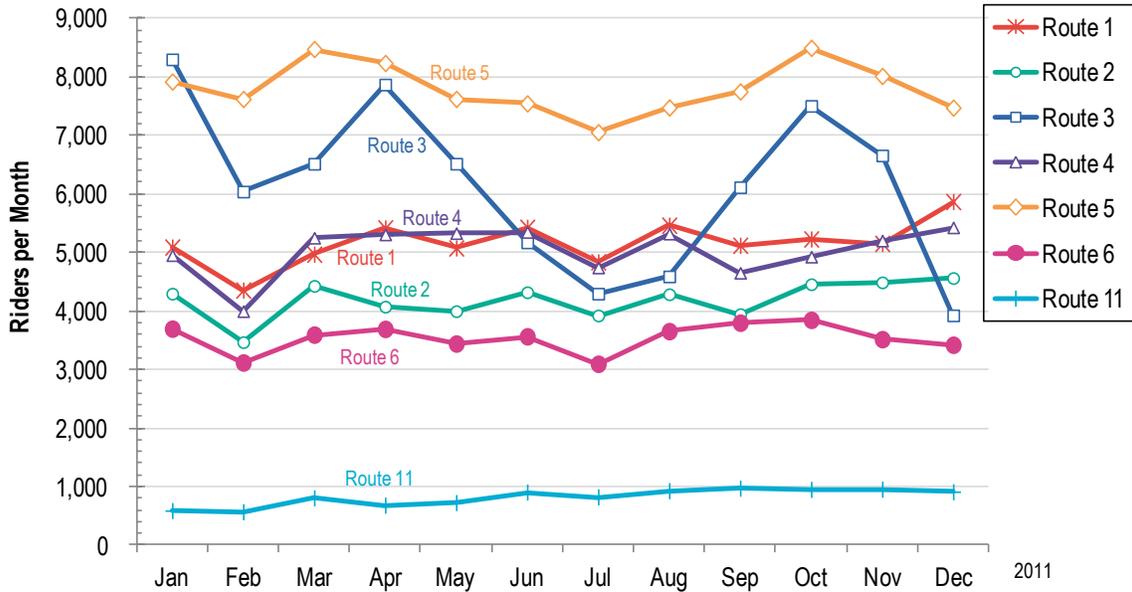
Source: Data from Cascades East Transit

Figure 3-9 shows ridership for each fixed-route in 2011. Route 5 (serving the St. Charles Medical Center area) and Route 3 (serving the COCC/OSU campus) are the highest ridership (and most productive) routes in the system, serving nearly 24% and nearly 19% of total ridership, respectively. Ridership on Route 3 declines significantly outside of COCC school sessions. Route 11 (Galveston corridor) has the lowest ridership and productivity of the Bend local fixed-routes, but operates for limited hours, with fewer trips per day than other routes, and does not run on Saturdays.

Based on data from November, 2011, the average number of daily boardings ranges from about 1,500 to 1,700 on weekdays and about 400 on Saturdays, which includes transfers. It is estimated that approximately 600-650 individual riders use the fixed-route system each weekday. Routes 1, 4, and 5, which provide access to retail and services, have the strongest Saturday ridership.

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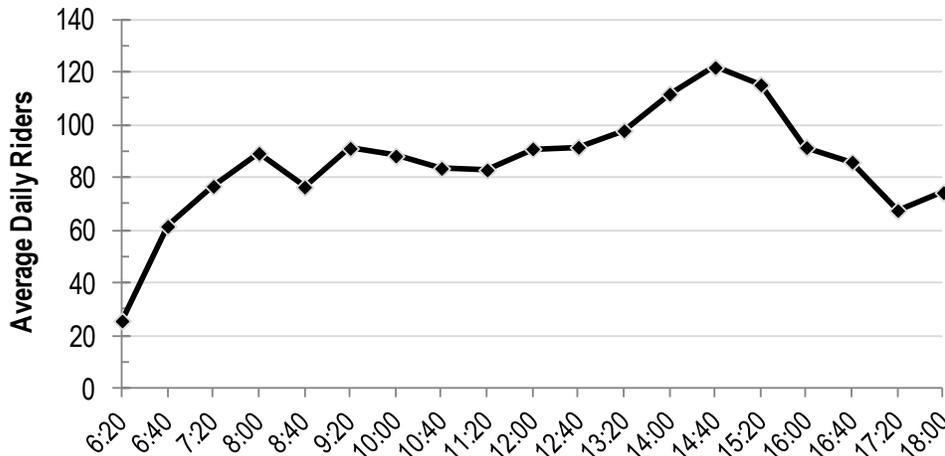
**Figure 3-9 Monthly Ridership by Route, 2011**



Source: Data from Cascades East Transit

Ridership is consistent throughout the day and is strongest in the midday period on most routes, peaking between about 2:00 – 3:00 PM, illustrated in Figure 3-10. This indicates that a primary use is for non-commute trips, such as shopping or errands. The lack of evening service hours limits the utility of the system for work shifts beyond 6 PM, such as at St. Charles Medical Center, or for many service sector jobs.

**Figure 3-10 Average Weekday Ridership by Time of Day, November 1-14, 2011**



Source: Data from Cascades East Transit

## Dial-A-Ride

Dial-A-Ride (DAR) curb-to-curb service is provided for individuals with disabilities who cannot ride the fixed-route bus system, as well as for low-income seniors. Priority is given to persons with disabilities. DAR operates seven days a week within Bend city limits. The geographic coverage and days/hours of availability, listed in Figure 3-11, exceed the requirements for complementary paratransit service specified by the Americans with Disabilities Act (ADA) of 1991. Up to 10 vehicles are in service at any time.

Figure 3-11 Dial-A-Ride Service Characteristics

Days and Hours of Service	Scheduling Hours	Peak Vehicles in Service
Monday – Friday: 6:30 AM - 6:00 PM Saturday: 7:45 AM - 5:00 PM Sunday: 8:45 AM - 3:15 PM	Monday-Friday 7:30 AM - 4:30 PM	10

Source: Cascades East Transit

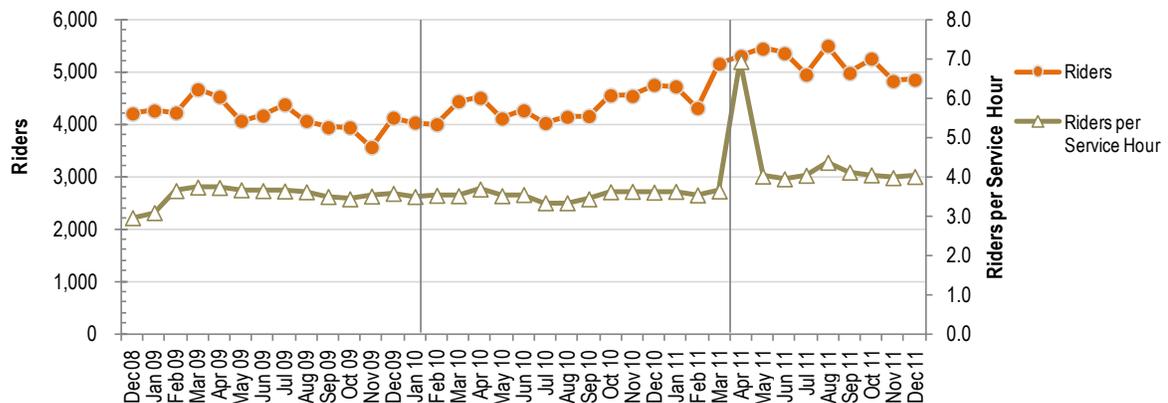
A full-fare one-way trip costs \$2.50, one dollar more than a trip on fixed-route bus service. A 50% discount is available for low-income disabled passengers or low-income seniors (60 and older).

Reservations may be made for the next day or up to 14 days in advance, but same day rides or changes are not accepted. DAR allows subscription, or regularly scheduled, trips subject to a 30-day waiting period and on a first-come, first-served basis. Riders must complete an eligibility process to use the service.

## Dial-A-Ride Performance

Figure 3-12 illustrates DAR ridership for 2009-2011, in relation to the number of rides provided per vehicle hour (productivity).

Figure 3-12 Monthly Dial-A-Ride Ridership and Productivity, 2009-2011



Source: Data from Cascades East Transit

## Operating Cost, Performance Indicators, and Funding

In fiscal year 2009-2010, the operating cost of fixed-route service was approximately \$1.5 million, of which over 10% was recovered from fares. The average cost per hour of fixed-route service was about \$72 per vehicle hour. Dial-A-Ride service costs an additional \$1.0 Million to operate. As shown in Figure 3-13, it is over four times more expensive to serve a trip on Dial-A-Ride than an individual boarding on fixed-route service.

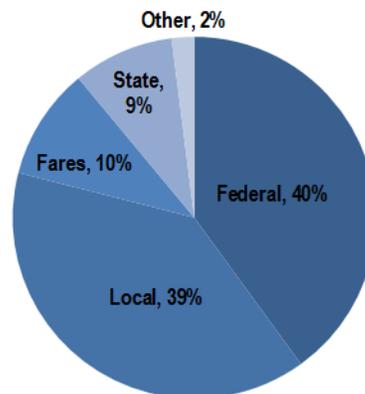
**Figure 3-13 Summary of Performance and Operating Costs, FY 2009-2010**

Service Type	Ridership (Unlinked Trips)	Operating Cost	Cost per Vehicle Revenue Hour	Cost per Ride (Unlinked Trip)	Farebox Recovery
Fixed-Route System	327,904	\$1.5 M	\$71.24	\$4.54	10.9%
Dial-A-Ride	49,524	\$1.0 M	\$72.08	\$20.34	8.2%

Source: National Transit Database

To support fixed-route and Dial-A-Ride service, the City of Bend provides transit operating funding of over \$1 million from its general fund, the largest non-federal revenue source, to meet the requirement for local matching funds for Federal section 5307 and 5310 funds. Federal funds provide about 40% of operating costs.

**Figure 3-14 Operating Funding Sources, FY 2009-2010**



Source: National Transit Database, 2010